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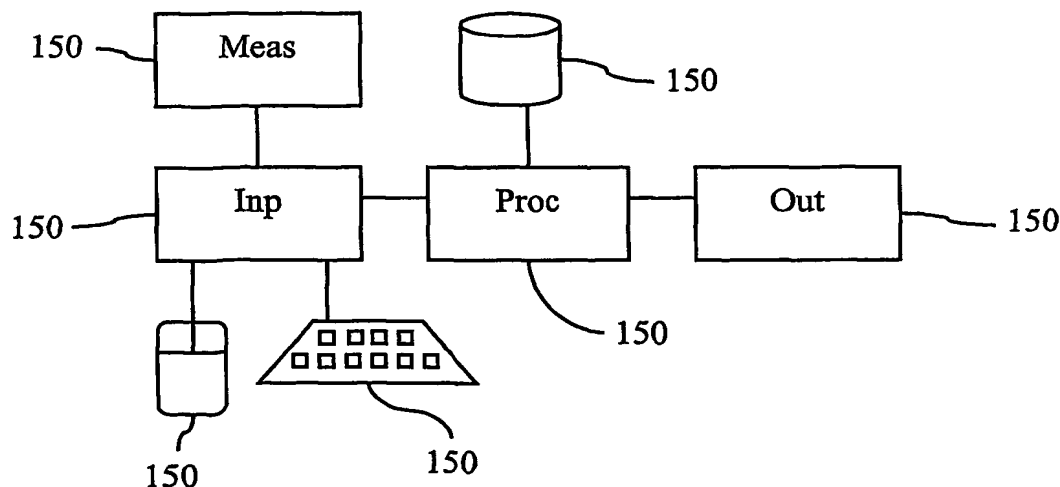
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(54) Title: RECONSTRUCTION OF A SURFACE TOPOGRAPHY



(57) **Abstract:** A system for reconstructing a surface of an object includes an input 120 for receiving a 2-dimensional grid of measurements representing a surface of an object. For each grid point the measurements include corresponding information on the slope of the surface in the x-direction and y-direction. A processor 100, operated under control of a program, selects a 2-dimensional part of the grid and fits a corresponding part of the surface to the measurements of all grid points in the selected part. For each grid point of the selected part, the fitting is based on both the corresponding first and second slope information. An output 160 of the system provides a representation of at least the reconstructed surface part to a user.

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